Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Parts 90 of the	)	
Commission's Rules to Provide	)	**PR Docket No. 89-552**
for the Use of 220-222 Channels	)	**RM-8506**
by the Private Land Mobile	)	
Radio Service	)	
		[illegible]
Implementation of Section 3(n)	)	
of the Communications Act -	)	**GN Docket No. 93-252**
	)	
Regulatory Treatment of Mobile Services	)	
Implementation of Sections 309(j) of	)	**PP Docket No. 93-253**
the Communications Act -- Competitive	)	
Bidding, 220-222 MHz	)	

To: The Commission

COMMENTS OF
THE INDUSTRIAL TELECOMMUNICATIONS ASSOCIATION

The Industrial Telecommunications Association (ITA) pursuant to Section 1.415 of the rules and regulations of the Federal Communications Commission (FCC or Commission), hereby submits these Comments in response to the Commission's Second Memorandum Opinion and Order and Third Notice of Proposed Rule Making (Third NPRM) released in the above-captioned proceeding on August 28, 1995.

I. Preliminary Statement

1. The Industrial Telecommunications Association (ITA hereafter), a for-profit association incorporated under the laws of the District of Columbia, is the national advocate and service organization for more than 7,800 private land mobile radio licensees. The Association provides diverse, progressive services, including: frequency coordination, communications/application engineering, licensing, FCC research, license data, and representation before the FCC and U.S. Congress. Founded in 1953, ITA's reputation and dedication for maintaining quality services has earned it the support of 12 national and regional trade associations.

II. Introduction

2. In this proceeding, the FCC proposes to allow licensees to offer fixed wireless services and paging in the 220-222 MHz radio service. The Commission also proposes eliminating other rules regarding use of data and non-trunked equipment. Additionally, the FCC proposes to move from site-specific licensing to geographic service areas.

3. Also, the Third NPRM proposes three options for the 33 applications for non-commercial 220 MHz nationwide licenses: dismiss them and auction the licenses; choose among them through lottery; or choose among them through comparative hearing.

III. FCC to Drop Non-Commercial Allocation

4. ITA will restrict its comments to the FCC's proposals concerning pending applications for nationwide, non-commercial channels. The Commission tentatively concluded to reverse its position on the allocation of 30 channels for non-commercial, nationwide licenses.[1]

5. ITA asserts that a nationwide allocation of spectrum for private, internal-use radio systems is in the public interest and should still be a priority for the FCC. ITA reminds the Commission that the decision to implement non-commercial, nationwide licenses was influenced by a petition of United Parcel Service of America, Inc. (UPS hereafter), which suggested that four ten-channel blocks be reserved for nationwide systems.[2] UPS is one of 20 applicants for non-commercial nationwide five-channel blocks, and also one of the 14 applicants for ten-channel blocks. "...[T]he proposed assignment of nationwide frequencies would attract users having large scale needs for private land mobile radio services," UPS wrote in its petition for rule making. "The stable economic bases of these users would permit them to fund the much-needed research and development in narrowband technologies and equipment."[3]

6. Companies have a keen interest in maintaining state-of-the-art internal communica-

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[1]220 MHz *Second Memorandum Opinion and Order and Third Notice of Proposed Rulemaking*, (released August 28, 1995) at 21.

[2]Petition For Rule Making of United Parcel Service of America, Inc., November, 1988, at 18.

[3]UPS Petition for Rule Making at 23.

tions. UPS, for example, has already spent millions of dollars to develop narrowband technology. As a domestic package delivery service, UPS uses land mobile radio to support its fleet operation — a fleet that consists of more than 55,000 delivery vehicles, 10,000 tractors, 30,000 trailers and 100 large jet aircraft. UPS' subsidiary, II Morrow, Inc., was heavily involved in the research and development of 5 kilohertz-wide channels. Another UPS subsidiary, Roadnet Technologies, Inc., has produced digitized maps and computerized dispatching systems to be used with the proposed UPS system.

7. In 1988, UPS had experimental narrowband licenses in the 150 MHz band in 19 top U.S. markets, and was reporting successful research and development.[4] UPS was also successful in transmitting data at high speeds using narrowband technology.[5] In the Third NPRM, the FCC says that it is not interested anymore in the development of 5 kilohertz narrowband technology. Yet, companies, such as UPS have already footed the bill.[6]

IV. Public Benefit From Private, Internal Systems

8. In attempting to back away from its original allocation of non-commercial channels, the FCC essentially says that it perceives no demand on the part of the public for a non-

[4]"Through these efforts, UPS gaining invaluable theoretical and practical knowledge about the operation of digital narrowband land mobile technologies." — Comments of United Parcel Service, Inc., March, 1990, at 4.

[5]UPS' Petition for Reconsideration, May 1991, at 5.

[6]220 MHz *Third NPRM* at 22.

commercial, nationwide spectrum allocation.[7] ITA vehemently disagrees with this assertion. Herein, we will cite two more examples of transportation companies whose nationwide operations demand private, internal-use radio systems. The public, coast-to-coast, benefits from their services.

9. Airborne Freight Corporation, also known as Airborne Express, is another applicant for non-commercial nationwide frequencies. Airborne has more than 24,000 employees and contract workers, and its total revenues have grown from 1.1 million in 1990 to almost $2 billion in 1994.

10. To maintain this growing, successful operation, Airborne uses 12,000 radios, a number that has doubled since the beginning of this 220 MHz proceeding. The international delivery service has 260 facilities domestically and uses 350 dispatch points or base stations located across all 50 states. Airborne estimates that it delivered more than 191 million shipments to more than 400,000 customers in 1994.

11. On an average day, Airborne processes, and keeps track of, more than 800,000 packages. To do this, it must maintain vital communications with the field. The company uses for radios to dispatch personnel for package pickups, confirming deliveries and reporting problems such as vehicle breakdowns. Radios are seen as a key tool, essential for field operations. The company's radio systems operate at various places across the radio spectrum:

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[7]220 MHz *Third NPRM* at 21.

from the VHF band to the 800 MHz and 900 MHz bands. Increasingly, Airborne has been forced to rely on third-party specialized mobile radio operators for service, because of congestion in the private land mobile bands.

12. Airborne plans to use the 220 MHz band for voice operations to replace all of the commercial systems that it uses. One of the many problems that Airborne finds using commercial networks is that it cannot depend on them to maintain the same technology. Airborne Express views 220 MHz as the last refuge from commercial networks. The price of using commercial networks for internal communications is also prohibitive. Airborne estimates that it spends three to five dollars per vehicle each month on its private systems. However, that number rises by a factor of four when it uses a third-party SMR for service. Estimates for enhanced SMR service run up to roughly one hundred dollars per vehicle. Airborne uses commercial networks only when it cannot find frequencies on which it can operate a private system. The price the carrier pays for commercial service is passed on to its customers. Essentially, the Commission is effecting a surcharge on private companies by forcing them to use commercial service providers.

V. Nationwide, Internal-Use System Keeps Federal Express' Packages On Time

13. Federal Express (FedEx), with more than 110,000 employees worldwide, is another prime example of how the public benefits from well-coordinated, overnight delivery of packages. The speed and efficiency that this company achieves in its service to 192 countries would not

be possible without private, internal-use radio systems.

14. In 1978, when FedEx began developing its mobile data network, there were no public providers of wireless data. Within 18 months, FedEx radio engineers completed the initial development and added a mobile data overlay to the company's existing 800 MHz voice channels in Chicago. After building out the mobile data network across the nation, FedEx has spent the last few years optimizing the system. Today, the system supports state-of-the art IBM 386 processor-based mobile data terminals, which allow packages to be tracked in a precise manner. In the near future, the company plans to increase the signalling rate over the channels by a factor of four. Improving efficiency allows additional information to be transmitted over the channels, and the system can be expanded without using more spectrum.

15. There are two distinct divisions within FedEx, each of which would be considered major wireless users in their own right. FedEx Air Operations looks and functions just as a major airline, with 475 aircraft using 325 airports worldwide. Supporting these operations are 250 private radio systems using 9,000 portable radios and 300 control stations. Safety is a key issue in loading tons of freight aboard aircraft. Most aircraft-support radio systems are located at the airport and use portable radios over a short range.

16. The FedEx ground operations are equally impressive, operating 35,000 vehicles that drive 2.2 million miles in delivering 2.5 million packages daily. To orchestrate this whirlwind of activity, the company uses 700 radio systems and more than 40,000 wireless devices, logging

3.3 million transactions a day. Through its varied experiences, FedEx has decided that public networks are an impractical solution for a large, communications-intensive fleet of vehicles. The company has numerous wireless communications requirements, which include voice, data, in-building coverage, adequate capacity and low costs. In Tokyo, a wireless service vendor promised mobile data capabilities but later had to drop the service because of design flaws. Today, FedEx uses a voice-only system to dispatch its fleet in Tokyo. Additionally, FedEx has also had disappointing experiences with Hong Kong's public mobile data service, which has been inferior compared with the company's U.S. operations.

VI. Proposed Auctions of Nationwide, Non-Commercial Frequencies

17. ITA believes that, in the 220 MHz radio service, the FCC is manufacturing a situation where frequencies are to be auctioned. The Commission states that since the non-nationwide licensees are providing subscriber-based services, "it is a strong indication that this will likely be the principal use of the spectrum by prospective nationwide licensees." ITA believes this is tortured logic. The FCC can easily request information from the non-commercial applicants to ensure that they will use the spectrum for private, internal-use communications. This process is well within this agency's spectrum management role.

18. ITA believes that the proposal to auction spectrum previously allocated for private runs afoul of language in the Omnibus Budget Reconciliation Act of 1993 in a number of ways. First, spectrum auctions are not to be the driving force behind FCC spectrum allocations, or in

this case, the revision of a previous allocation. Second, private, internal-use companies are exempt from spectrum auctions.

19. In a recent press statement, FCC Chairman Reed Hundt placed his spectrum management policies in plain and simple terms, in reference to congressional budget cuts. "The Senate subcommittee appropriations would kill this cash cow, even while we're trying to milk it for billions of more dollars of auction revenue," Hundt said. ITA believes that Chairman Hundt's statement eloquently encapsulates the current milieu at the Commission where auction dollars take precedence over other, more vital spectrum management considerations.

VII. Conclusion

20. Private radio was borne out of the special needs of industry for communications — needs that the common carrier companies could not fulfill. Companies choose to be private radio licensees because their communications needs are too specialized, their coverage areas too unique, and their system reliability needs too critical — to rely on a third-party provider of communications. These wireless communications systems allow American industry to be more productive and competitive worldwide, but the ability to communicate in times of crisis can save lives within the company and the community, as well.

21. Nearly all of the FORTUNE 500 companies have at least one radio system licensed in the private radio services. The top 10 industrial companies have more than 6,000 private land mobile licenses. Today, more than 25,000 U.S. companies, both large and small, use private radio to keep their operations running smoothly. ITA believes the FCC should recognize the importance of private, internal-use radio systems and preserve spectrum allocations at 220-222 MHz for these systems on a nationwide basis.

Respectfully submitted,

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